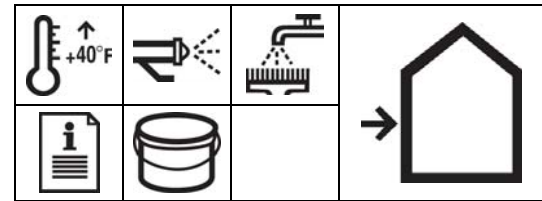


Sto AirSeal™

81210 Sto AirSeal™
 Fluid-applied, Vapor Permeable Air Barrier
 ASHRAE 90.1 Compliant
 ASHRAE 189.1 Compliant



Technical Data			
REPORT	TEST METHOD	TEST CRITERIA	TEST RESULTS
Air Leakage of Air Barrier Assembly (w Sto Gold Fill® Joint Treatment)	ASTM E 2357	< 0.2 L/s·m ² at 75 Pa (< 0.04 cfm/ft ² at 1.57 psf)	0.016 L/s m ² at 75 Pa (0.003 cfm/ft ² at 1.57 psf)
Water Vapor Permeance	ASTM E 96	Measure	14 perms
Air Leakage (w Sto Gold Fill® Joint Treatment)	ASTM E 2178	≤ 0.02 L/m ² ·s @ 75 Pa (≤ 0.004 cfm/ft ² @ 1.57 psf)	< 0.0002 L/m ² ·s @ 75 Pa (< 0.0014 cfm/ft ² @ 1.57 psf)
Low Temperature Crack Bridging	ASTM C-1305	No cracking	Specimens pass 10 cycles of extension and compression at -15 °F
Water Column (w Sto Gold Fill® Joint Treatment)	AATCC 127 (modified)	No leakage for 5 hours minimum	Passed – Both product and product with joint treatment
Elongation	ASTM D 412	Measure	>750 %
Tensile Strength	ASTM D 412	Measure	>75 psi
VOC (g/L)	SCAQMD Rule 1113	≤100 g/L	<20 g/L
% Solids (by weight)	Calculation	Measure	55%
Color	N/A	N/A	Tan

Sto AirSeal™ is a fluid-applied, acrylic-based primary air barrier material that cures to form a seamless membrane. It is applied directly to vertical above grade concrete masonry units (CMU), brick masonry & cast in place concrete. It can also be used with various sheathings including Glass Mat Gypsum, Plywood & OSB. It functions as an air barrier when combined with StoGuard® joint and rough opening treatment. Sto AirSeal™ can be used beneath various claddings including metal panels, stone and brick veneer with a cavity, stucco and adhered masonry veneer, wood, vinyl or fiber cement sidings.

Coverage

Approximately 94-125 ft² (8.73 – 11.6 m²) per pail when applied at 60-80 wet mils (30-40 mils dry). Coverage may vary depending on application technique and surface condition.

Packaging

5 gallon (19 L) pail.

Shelf Life

12 months, if properly stored and sealed.

Storage

Store in a cool, dry area. Protect from extreme heat [90°F (32°C)], freezing, and direct sunlight.

Features	Benefits
1 Waterproof material	Minimizes risk of water damage
2 Vapor Permeable	Minimizes risk of condensation in the walls
3 Structural	No air leakage between sheathing and Sto AirSeal
4 Durable	Does not tear or lose its effectiveness while in service
5 Resists UV Degradation	Gives peace of mind if construction delays occur; 6 months exposure
6 Spray applied via airless spray equipment in one application	Easy, fast installation; does not require specialized spray equipment or back-rolling
7 Water-based	Safe, non-toxic, VOC compliant
8 Compatible with other StoGuard Products	Reliability and peace of mind

Surface Preparation

Surfaces must be clean, dry, and free of frost, damage, and all bond-inhibiting materials, including dirt, efflorescence, form oil and other foreign matter. Sheathing must be Exterior Grade or Exposure 1

wood-based sheathing or code approved glass mat gypsum sheathing. Sheathing must be installed in compliance with the building code and manufacturer's recommendations. CMU surfaces should have flush joints.

Sto AirSeal™

Mixing

Generally, no mixing required. Prolonged storage may cause slight settling. If settling

occurs mix to a uniform consistency with an electric drill mixer.

Application

Provide adequate ventilation during application and drying period.

Surface and ambient temperature must be minimum 40° F (4° C) and rising during application and drying period and below 100°F (38° C). Apply only to sound and clean, dry, properly prepared, frost-free surfaces. Sheathing joints, inside and outside corners and rough openings must be treated with StoGuard joint and rough opening treatment.

Repair cracks in CMU with Sto joint treatment material – Sto Gold Fill with StoGuard Mesh or StoGuard RapidSeal

Transition details at foundation, floors, roof, and abutments with dissimilar materials in the wall assembly must be detailed with Sto transition membrane materials or other compatible transition materials to achieve a continuous air barrier assembly.

Spray Application:

Apply Sto AirSeal to the prepared substrate using spray equipment such as Sto's M-8 Spray Pump or airless spray equipment that pumps a minimum 1 gallon per minute (GPM). The recommended tip size is

17 mils. Spray uniformly at a wet thickness of 60 - 80 mils. Use horizontal, then overlapping vertical sweeping motions for continuous coverage to achieve a void and pinhole free surface. CMU surfaces may require multiple passes depending on porosity, joint profile, trueness of the wall surface, and other variables that may exist. Avoid excess build-up of wet material to prevent sag, especially on non-porous surfaces and during cold or damp weather.

If temporary heaters are used ventilate to the exterior to prevent water vapor from accumulating on or within the wall assembly components

Curing/Drying

Sto AirSeal dries in 4-6 hours under normal drying conditions [70°F (21°C), 50% RH] and cures within 24 hours. Protect from rain and freezing until completely dry. Cold weather or damp conditions will prolong drying period. Product has slight tack when dry.

Clean Up

Clean tools and equipment with water immediately after use. Dried material can only be removed mechanically or with solvent such as mineral spirits. Exercise care when handling solvents and review MSDS prior to use.

Limitations

- Use only when surface and ambient temperatures are and will remain above 40°F (4° C) during application and drying period.
- Do not use when temperature is above 100°F (38° C).
- Can be left exposed to weather for up to 6 months. Protect with cladding within 6 months of application.
- Do not use on surfaces with standing water, below grade, or on surfaces subject to water immersion.
- Not recommended to apply with roller or brush; use spray application
- Not recommended for spanning joints in sheathing greater than 1/8 inch (3 mm) wide.
- Use a slip sheet (typically one layer of building paper, or building paper and Sto DrainScreen™) between Sto AirSeal and stucco/metal lath on sheathing, and similarly constructed wall assemblies such as adhered masonry veneer over metal lath. Paper may be omitted when paper-backed stucco lath is used.

Health And Safety**Health Precautions**

Ventilate enclosed spaces when applying. Use of NIOSH approved air purifying organic vapor respiratory if necessary. Wear of protective rubber neoprene gloves to minimize risk of exposure.

Safety Precautions

Use adequate ventilation. Safety goggles and protective gloves are recommended. Remove contaminated clothing immediately.

First Aid

SKIN CONTACT: Wash thoroughly with soap and water.

EYE CONTACT: Flush affected areas with water and contact a physician.

RESPIRATORY PROBLEMS: If respiratory irritation occurs, go to fresh air. Flood work area with fresh air and if irritation continues, seek medical attention.

HYGIENE: Wash hands immediately after use. Wash clothing before re-use.

Spills

Dry stage: Sweep and dispose of in proper receptacle. **Wet stage:** Add absorbent, sweep up and discard. Keep out of sewers and other public water systems.

Disposal

Dispose of in accordance with local, state or federal regulations.

Warning

KEEP CONTAINER CLOSED WHEN NOT IN USE. KEEP OUT OF THE REACH OF CHILDREN. NOT FOR INTERNAL CONSUMPTION. FOR INDUSTRIAL USE ONLY. Consult the Material Safety Data Sheet on www.stocorp.com for further health and safety information.

LIMITED WARRANTY

This product is subject to a written limited warranty which can be obtained free of charge from Sto Corp.

Refer to Sto Specifications for more complete information on proper use and handling of this product.

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S155-81210
Revision Number: 02
Date: 12/2011

**Attention**

This product is intended for use by qualified professional contractors, not consumers, as a component of a larger construction assembly as specified by a qualified design professional, general contractor or builder. It should be installed in accordance with those specifications and Sto's instructions. Sto Corp. disclaims all, and assumes no, liability for on-site inspections, for its products applied improperly, or by unqualified persons or entities, or as part of an improperly designed or constructed building, for the nonperformance of adjacent building components or assemblies, or for other construction activities beyond Sto's control. Improper use of this product or use as part of an improperly designed or constructed larger assembly or building may result in serious damage to this product, and to the structure of the building or its components. **STO CORP. DISCLAIMS ALL WARRANTIES EXPRESSED OR IMPLIED EXCEPT FOR EXPLICIT LIMITED WRITTEN WARRANTIES ISSUED TO AND ACCEPTED BY BUILDING OWNERS IN ACCORDANCE WITH STO'S WARRANTY PROGRAMS WHICH ARE SUBJECT TO CHANGE FROM TIME TO TIME.** For the fullest, most current information on proper application, clean-up, mixing and other specifications and warranties, cautions and disclaimers, please refer to the Sto Corp. website, www.stocorp.com.